

## IN THE CLAIMS:

Claims 4 through 16 and 21 through 23 have been amended herein. New claims 24 through 40 are to be added. All of the pending claims 1 through 40 are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

### Listing of Claims:

1. (Original) A method of identifying row type or Fusarium head blight (FHB) resistance in a barley or related *Triticeae* plant, comprising the use of at least one molecular marker shown in the linkage maps of FIGS. 1 and 2, that is linked with a gene that controls row type.

2. (Original) The method of claim 1, wherein a test plant is identified as having two-rowed or six-rowed spikes when a molecular marker in the test plant shows the same type as a barley or related *Triticeae* plant that is two-rowed or six-rowed, respectively.

3. (Original) The method of claim 1, wherein the test plant is identified as FHB resistant or FHB susceptible when the molecular marker in the test plant shows the same type as a barley or related *Triticeae* plant that is FHB resistant or FHB susceptible, respectively.

4. (Currently amended) The method of ~~any one of claims 1 to 3~~ claim 1, wherein the molecular marker comprises the nucleotide sequence set forth in any of SEQ ID NOS:1 to 5, or a partial sequence thereof.

5. (Currently amended) The method of ~~any one of claims 1 to 4~~ claim 1, comprising the following steps (a) to (d):

- (a) preparing a DNA sample from a barley or related *Triticeae* plant;
- (b) digesting the prepared DNA sample with a restriction enzyme;
- (c) separating the DNA fragments by size; and
- (d) comparing the size of a detected DNA fragment with that of a control.

6. (Currently amended) The method of ~~any one of claims 1 to 4~~ claim 1, comprising the following steps (a) to (d):

- (a) preparing a DNA sample from a barley or related *Triticeae* plant;
- (b) performing a PCR reaction using primer DNAs, with the prepared DNA sample as a template;
- (c) separating the amplified DNA fragments by size; and
- (d) comparing the size of a detected DNA fragment with that of a control.

7. (Currently amended) The method of ~~any one of claims 1 to 4~~ claim 1, comprising the following steps (a) to (e):

- (a) preparing a DNA sample from a barley or related *Triticeae* plant;
- (b) digesting the prepared DNA sample with a restriction enzyme;
- (c) performing an AFLP reaction using the digested DNA sample as a template;
- (d) separating the amplified DNA fragments by size; and
- (e) comparing the detected DNA pattern with that of a control.

8. (Currently amended) The method of ~~any one of claims 1 to 7~~ claim 1, wherein the barley or related *Triticeae* plant is a barley.

9. (Currently amended) A reagent for identifying row type or ~~FHB~~ Fusarium head blight (FHB) resistance in a barley or related *Triticeae* plant, comprising an oligonucleotide of at least 15 nucleotides that is complementary to a DNA comprising the nucleotide sequence set forth in any of SEQ ID NOS:1 to 5, or a complementary strand thereof.

10. (Currently amended) A reagent for identifying row type or ~~FHB~~ Fusarium head blight (FHB) resistance in a barley or related *Triticeae* plant, comprising an oligonucleotide comprising the nucleotide sequence set forth in any of SEQ ID NOS:6 and 7.

11. (Currently amended) The reagent of claim 9 ~~or 10~~, wherein the barley or related *Triticeae* plant is a barley.

12. (Currently amended) A method of generating an artificially altered barley or related *Triticeae* plant having two-rowed spikes, said method comprising the step of selecting, at an early stage, a plant identified as being two-rowed using the method ~~of any one of claims 1 to 7~~ according to claim 1.

13. (Currently amended) A method of generating an artificially altered barley or related *Triticeae* plant having six-rowed spikes, said method comprising the step of selecting at an early stage a plant identified as being six-rowed using the method ~~of any one of claims 1 to 7~~ according to claim 1.

14. (Currently amended) A method of generating an artificially altered barley or related *Triticeae* plant having a trait of FHB resistance, said method comprising the step of selecting, at an early stage, a plant identified as FHB resistant using the method ~~of any one of claims 1 to 7~~ according to claim 1.

15. (Currently amended) A method of generating an artificially altered barley or related *Triticeae* plant having a trait of FHB susceptibility, said method comprising the step of selecting, at an early stage, a plant identified as FHB susceptible using the method ~~of any one of claims 1 to 7~~ according to claim 1.

16. (Currently amended) The method ~~of any one of claims~~ according to claim 12 to 15, wherein the barley or related *Triticeae* plant is barley.

17. (Original) A barley or related *Triticeae* plant having two-rowed spikes, generated by the method of claim 12.

18. (Original) A barley or related *Triticeae* plant having six-rowed spikes, generated by the method of claim 13.

19. (Original) A barley or related *Triticeae* plant with FHB resistance, generated by the method of claim 14.

20. (Original) A barley or related *Triticeae* plant with FHB susceptibility, generated by the method of claim 15.

21. (Currently amended) The barley or related *Triticeae* plant of ~~any one of claims~~ claim 17 to 20, wherein the barley or related *Triticeae* plant is a barley.

22. (Currently amended) A barley or related *Triticeae* plant, which is a progeny or clone of the barley or related *Triticeae* plant of ~~any one of claims~~ claim 17 to 21.

23. (Currently amended) A reproductive material of the barley or related *Triticeae* plant of ~~any one of claims~~ claim 17 to 22.

24. (New) The reagent of claim 10, wherein the barley or related *Triticeae* plant is a barley.

25. (New) The method according to claim 13, wherein the barley or related *Triticeae* plant is barley.

26. (New) The method according to claim 14, wherein the barley or related *Triticeae* plant is barley.

27. (New) The method according to claim 15, wherein the barley or related *Triticeae* plant is barley.

28. (New) The barley or related *Triticeae* plant of claim 18, wherein the barley or related *Triticeae* plant is a barley.

29. (New) The barley or related *Triticeae* plant of claim 19, wherein the barley or related *Triticeae* plant is a barley.

30. (New) The barley or related *Triticeae* plant of claim 20, wherein the barley or related *Triticeae* plant is a barley.

31. (New) A barley or related *Triticeae* plant, which is a progeny or clone of the barley or related *Triticeae* plant of claim 18.

32. (New) A reproductive material of the barley or related *Triticeae* plant of claim 18.

33. (New) A barley or related *Triticeae* plant, which is a progeny or clone of the barley or related *Triticeae* plant of claim 19.

34. (New) A reproductive material of the barley or related *Triticeae* plant of claim 19.

35. (New) A reproductive material of the barley or related *Triticeae* plant of claim 20.

36. (New) A barley or related *Triticeae* plant, which is a progeny or clone of the barley or related *Triticeae* plant of claim 20.

37. (New) A reproductive material of the barley or related *Triticeae* plant of claim 21.

38. (New) A barley or related *Triticeae* plant, which is a progeny or clone of the barley or related *Triticeae* plant of claim 21.

39. (New) A reproductive material of the barley or related *Triticeae* plant of claim 22.